

# PATENT ABSTRACTS OF JAPAN

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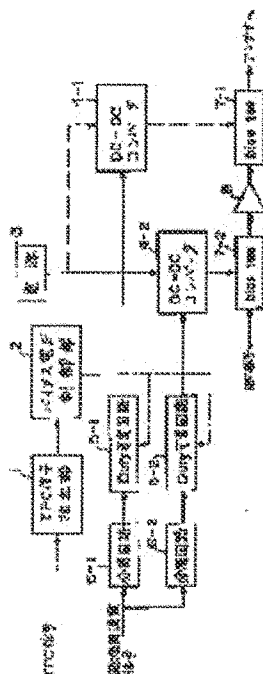
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## (54) METHOD AND DEVICE FOR CONTROL OF AMPLIFIER



(57)Abstract:

PROBLEM TO BE SOLVED: To provide a device which optimizes the power efficiency of a power amplifier by a small-scale circuit.

SOLUTION: A bias voltage control part 2 calculates the output power of a PA 8 on the basis of a TPC signal and determines a bias voltage which should be applied to bias tees 7-1 and 7-2 in order to maximize the power efficiency of the PA 8. The bias voltage control part 2 gives an indication to duty factor varying circuits 5-1 and 5-2 to vary the duty factor of frequency division signals of transmission frequency signals generated by frequency division circuits 6-1 and 6-2 and gives them to DC-DC converters 4-1 and 4-2 as driving signals. DC-DC converters 4-1 and 4-2 vary the voltage of a power source 3 in accordance with driving signals and apply them to bias tees 7-1

and 7-2. Thus, the output power of the PA 8 is controlled.